

$$h(t) = -16t^2 + 50$$

\downarrow height at time t
 \downarrow gravity \downarrow time sec
 \downarrow initial height in feet

0 12

X - wait time
(how long on wheel)

t - drop time

- ① How long to hit ground from 6:00, 9:00, 12:00, 3:00, 5:00?
- ② How long to hit cart from 6:00, 9:00, 12:00, 3:00?
- ③ How long to hit cart after 3 sec. from start? 34 sec?

To Car+

6:00 → 0.6614 sec.

0 sec
40 sec

9:00 → 2.5860 sec.

10 sec

12:00 → 3.5969 sec.

20 sec

3:00 → 2.5860 sec.

30 sec

class
verified
times

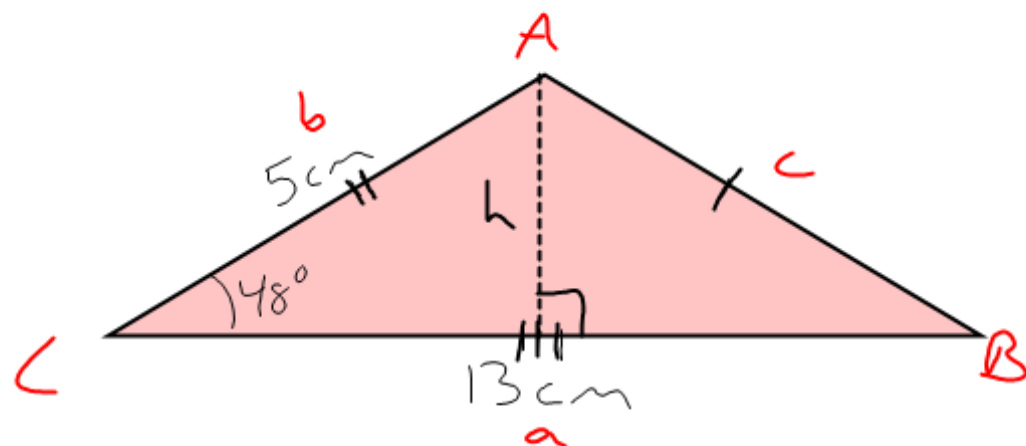
For Tues

- Come up with an equation for droptine as a function of x
 ↳ cart. (wait
time)

For Thursday

- write up horz. & vert. position
 - correct equations with all #'s/variables defined (4pts)
 - why $\frac{\pi}{20}$, how you found it, what it means (2pts)
 - why sin/cos (2pts)
 - how you tested (2pts) proof your equation works

Find the area



$$5 \cdot \sin 48^\circ = \frac{h}{5} \cdot 5$$

$$h = 5 \sin 48^\circ$$

$$A_{\Delta} = \frac{1}{2} b h$$

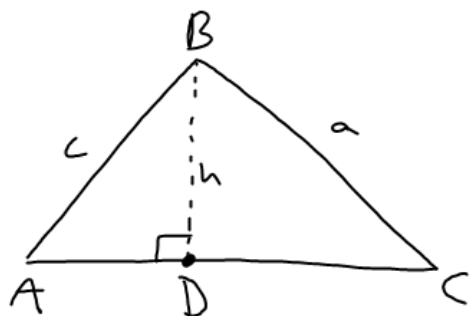
$$A = \frac{1}{2} (13) (5 \sin 48^\circ)$$

$$A \approx 24.15 \text{ units}^2$$

$$A_{\text{triangle}} = \frac{1}{2} b \cdot h$$

$$A = \frac{1}{2} a b \sin C$$

Law of Sines



$$\triangle ABD \quad \sin A = \frac{h}{c}$$

$$h = c \sin A$$

$$\triangle CBD \quad \sin C = \frac{h}{a}$$

$$h = a \sin C$$

$$c \sin A = a \sin C$$

$$\boxed{\frac{\sin A}{a} = \frac{\sin C}{c}}$$

trying to
find angle

$$\boxed{\frac{a}{\sin A} = \frac{c}{\sin C}}$$

trying to find
side

Set. 7.1 # 3, 5-8, 22, 23, 25, 27, 31, 33, 34, 39, 43-49 (odd)

- Change calculator to degree mode

- Remember bearings

N 36° E

means start at
N. go 36° toward E.

